

to date. This was necessitated by the removal of Dr. Benham to New Zealand after the MSS. had left his hands; thus justice has been done both to author and those for whom the book is intended.

Three other appendices to the *Platyhelminths* contain descriptions of the remarkable and extremely puzzling forms *Trichoplax*, *Pemmatodiscus*, and *Salinella*. Concerning these the author remarks that, "with the exception of *Pemmatodiscus*, they have only been met with in a 'domesticated' condition in aquaria, and it has been suggested that they are in reality imperfectly developed animals—embryos which cannot attain full development owing to these conditions."

The illustrations are numerous, singularly clear, and well executed, and for the most part original.

*Use-inheritance. Illustrated by the direction of Hair on the Bodies of Animals.* By WALTER KIDD, M.D., F.Z.S. London: Adam & Charles Black, 1901. Pp. 1-47; 16 text-cuts. Price 2s. 6d.

THE author attempts to show "that certain inherited characters of animals can only be interpreted by considering them to have arisen in ancestors of those animals by use or habit." He bases his argument upon the disposition of the hair on the bodies of animals. Frankly admitting that the general direction of the hair-slope on the body is open to selectionist interpretations, he contends that the familiar whorls and featherings of the hair found in the domestic horse, for example, can have but one explanation—"a dynamical one."

We do not find the author's arguments, often very obscurely set forth, at all convincing. At times, indeed, we venture to think that his method of winning converts is distinctly unfair and calculated to rouse much opposition. Thus he tells us that "The trifling intrinsic importance of these characters (whorls and featherings) . . . produces the impression . . . that *except for maintaining the credit of a great theory*, such as that of Weissmann, there is only one way of interpreting them, and that is according to Lamarek." We protest, and protest vigorously, against the imputation contained in the words we have italicized. Moreover, Lamarekism, by the majority of those qualified to speak, has been weighed and found wanting. It may well be that many things are as yet inexplicable by any theory yet promulgated, and till the light comes, let us say frankly, with Montaigne, "Nor am I ashamed . . . to confess I know not that which I do not know."

*A Guide to the Shell and Star-fish Galleries (Mollusca, Polyzoa, Brachiopoda, Tunicates, Echinoderma, and Worms), Department of Zoology, British Museum (Natural History).* 1901. Price 6d.

MANY even of those who cannot visit the Natural History Museum will be glad to have this book. Like its predecessors, it is a wonderful production, well written and well illustrated, the text-cuts being not only numerous but most excellent of their kind.

The three contributors to this work, Messrs. E. A. Smith, F. J. Bell, and R. Kirkpatrick, are all well known as first-rate authorities on the subjects with which they deal, and on the present occasion they have fulfilled a very difficult task in a really able manner.

The preparation of these Guides undoubtedly represents a task of quite exceptional difficulty, and not the least troublesome matter to be decided must be the plan of the book itself. The present volume may be described as a much condensed and elementary text-book on the particular groups dealt with: and to those who use the galleries wherein they are displayed, for the purpose of serious study, it will prove invaluable. To the collectors of "sea-weed," corals, shells, and other "pretty objects," this book will probably come as a revelation; and to many will open up hitherto unsuspected wonders and delights interwoven with the life-histories of the animals whose dead remains they cherish. Thus will the mere "collector" be converted into the serious student. The casual visitor will probably find this book too technical; for him, however, the General Guide will probably prove sufficient.

*The Fauna and Geography of the Maldive and Laccadive Archipelagoes.* Edited by J. STANLEY GARDINER, M.A. Vol. I. part 1. Plates 1-5; text-cuts 1-25. J. Clay & Sons: Cambridge University Press.

THE study of coral-reefs is one fraught with many and great difficulties, and attended with no small element of danger, as a perusal of these pages will show. In spite, however, of all obstacles, Mr. Gardiner and his colleagues have managed to reap a rich harvest, the first-fruits of which are here presented for the benefit of zoologist and geologist alike. It is certain that if the following parts maintain the same high standard of excellence displayed by the first issue, the work will form one of the most valuable treatises on the subject extant.

The present number includes five reports. Of these, the first two are by Mr. Gardiner, and contain the Introduction, an extremely interesting narrative of the expedition, and the description of the Maldive and Laccadive Groups, with notes on other coral formations in the Indian Ocean; the third deals with the Hymenoptera, and is written by Mr. P. Cameron; the fourth with the Land Crustaceans, by Mr. L. A. Borradaile; and the last with the Nemerteans, by Mr. R. C. Punnett.

Mr. Borradaile has had an advantage over Messrs. Cameron and Punnett, in that, owing to the nature of his subject, he has been enabled to make his more interesting reading of the last three reports; but from a scientific point of view no preference is possible—all are alike admirable, clear, concise, well planned, and, where necessary, well illustrated.